

Supplementary Information

Electrostatic droplets assisted in-situ synthesis of superparamagnetic chitosan microparticles for magnetic-responsive controlled drug release and copper ion removal

Chih-Yu Wang¹, Chih-Hui Yang^{2*}, Keng-Shiang Huang³, Chen-Sheng Yeh⁴, Andrew H.-J. Wang⁵, Chih-Hsin Chen^{1,2,3}

¹Dept. of Biomedical Engineering, I-Shou University, Taiwan

²Dept. of Biological Science & Technology, I-Shou University, Taiwan

³The School of Chinese Medicine for Post-Baccalaureate, I-Shou University, Taiwan

⁴Dept. of Chemistry, National Cheng-Kung University, Taiwan

⁵Institute of Biological Chemistry, Academia Sinica, Taiwan

*To whom all correspondence should be addressed

E-mail: chyang@isu.edu.tw

Tel: +886-7-615-1100 ext. 7312

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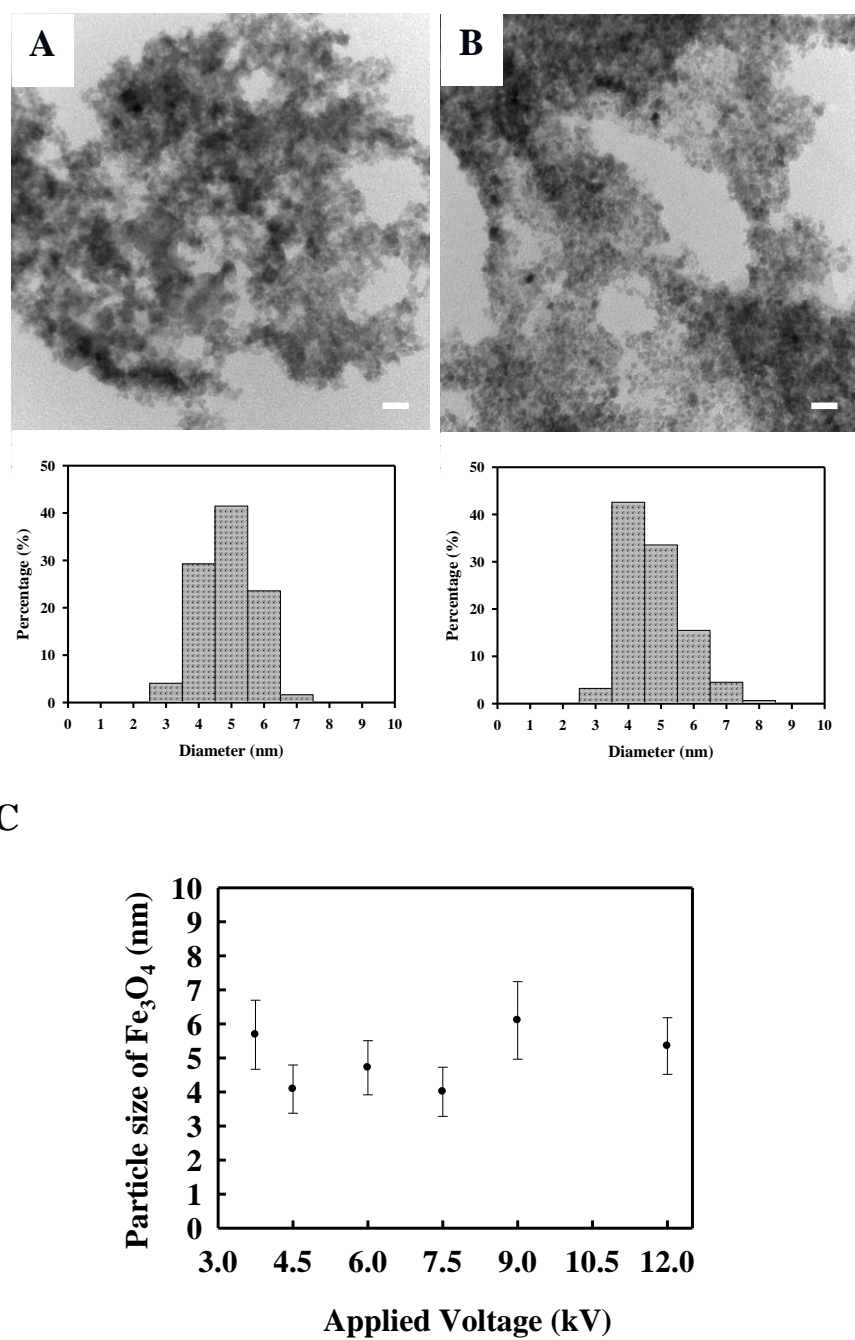


Fig. S1 TEM images of (A) the iron oxide nanoparticles, and (B) the iron oxide nanoparticles loaded-chitosan particles synthesized under an electric field of 3.75 kV. (C) The influence between the applied voltages in the ESD process and the particle size of the iron oxide nanoparticles loaded-chitosan particles. (A, B) Scale bars are 20 nm.

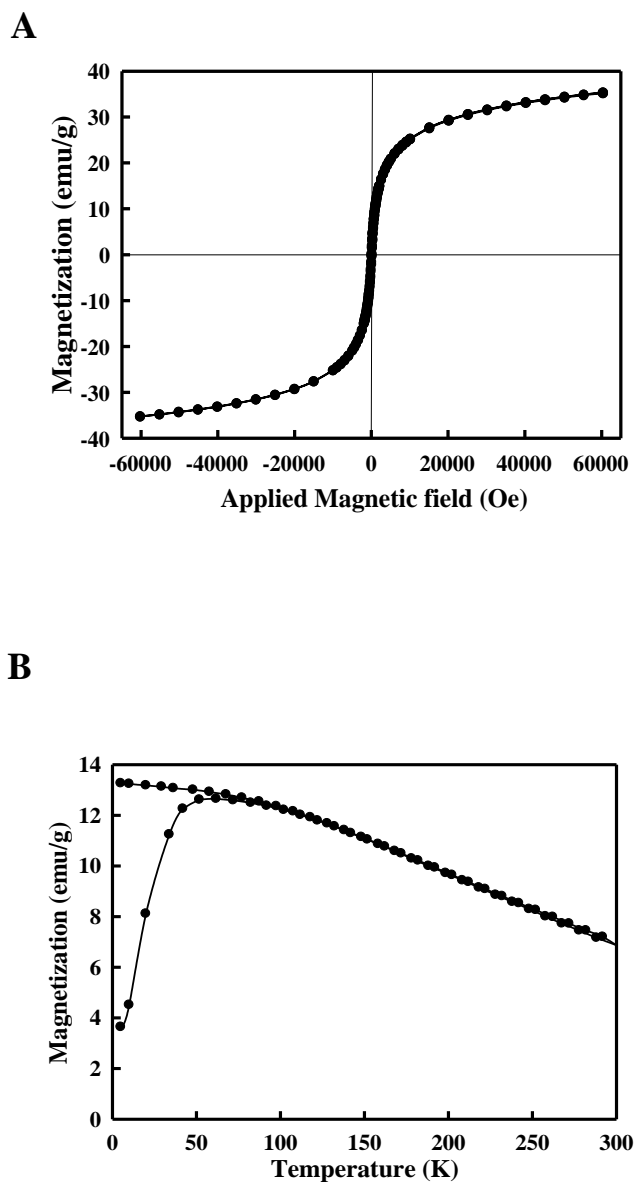


Fig. S2 Magnetic characteristic of the Fe_3O_4 -loaded chitosan particles (synthesized under an electric field of 3.75 kV). (A) Magnetization plots. (B) Temperature dependent ZFC-FC magnetization curves.

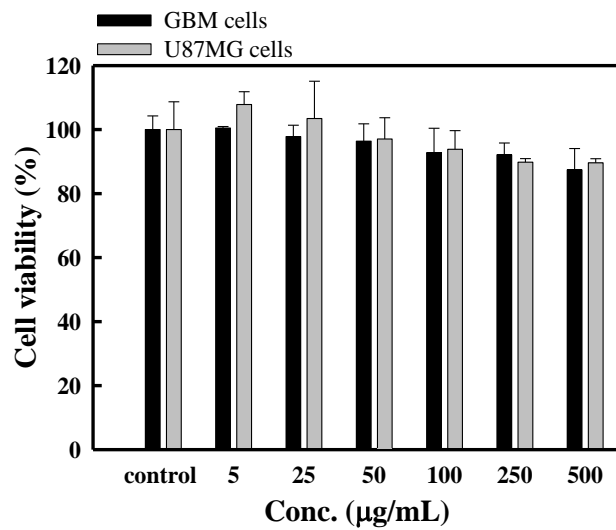


Fig. S3 Analysis of cell viability.

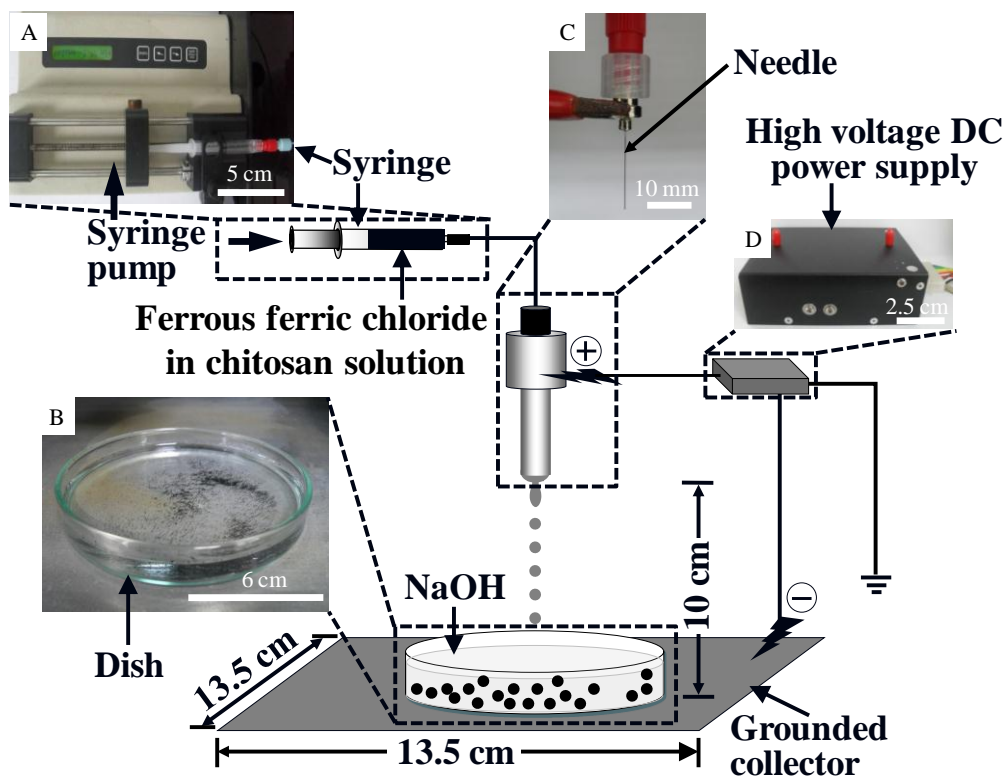


Fig. S4 Experimental setup of the electrostatic droplet system. (A~D) Close-up views of each equipment. Scale bars: A: 5 cm; B: 6 cm; C: 10 mm; and D: 2.5 cm.